Therapeutic Alliance in Face-to-Face Versus Videoconferenced Psychotherapy

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Despite the great potential videoconferencing holds for providing psychotherapy services to a wide range of individuals, it is presently underused by psychologists. Do psychologists hold negative attitudes that interfere with their willingness to use the technology? What do psychologists think about the impact of the technology on the therapeutic alliance? Thirty clinical psychologists were randomly assigned to watch an identical therapy session, either face-to-face or videoconferencing format. Our prediction that psychologists in the videoconferencing condition would rate the therapeutic alliance significantly lower than would psychologists in the face-to-face condition was supported. We discuss the need to develop appropriate therapist training and improve the general dissemination of information regarding videoconferencing as an important means by which to reduce negative attitudes toward the technology.

**Keywords:** videoconferencing, therapeutic alliance, psychotherapy, technology, attitudes

A positive therapist–client relationship has been considered an important aspect of the psychotherapy process since the very beginnings of psychology. Freud (1913/1953) wrote of the value of collaboration with patients and the importance of maintaining a friendly atmosphere in facilitating successful change. Many theorists from a variety of orientations developed this notion further, examining the qualities of therapist–client relationships that are correlated with positive outcome. Rogers (1951) described the ideal qualities of a therapeutic relationship (and other types of relationships associated with well-being) as consisting of respect, openness, empathic understanding, and congruence. Zetzel, who first used the term alliance (1956; as cited in Greenburg & Pinsof, 1986), believed that relational patterns from childhood were projected onto the therapeutic relationship. He also theorized that maintaining a beneficial alliance required that the therapist clarify each developmental stage and mirror it in the psychotherapy process.

Recently researchers once again have been studying the concept of alliance with evidence mounting that common factors contribute to therapeutic change (Horvath, 2001; Smith & Glass, 1977). Lester Luborsky of the Penn Psychotherapy Project (Alexander & Luborsky, 1986) was one of the researchers whose efforts created a pantheoretical definition of the alliance concept. This revived interest in the therapeutic relationship led to the development of a scale to measure alliance and, therefore, test these theories. Luborsky contributed to the development of the Penn Helping Alliance Scale, which was one of the first to directly measure alliance in the context of an actual face-to-face psychotherapy session. This and subsequent studies have found support for the reliability, validity, and predictive value of the Penn Helping Alliance Rating Scale (HAR; Alexander & Luborsky, 1986; Horvath, 2001). The scale has also been used to measure therapeutic alliance in sessions conducted via videoconferencing.

**Telehealth, Telepsychology, and Videoconferencing**

In recent years technology has changed the way in which health professionals deliver their services. Telehealth is defined as the use of electronic and communications technology to accomplish health care over distance (Jerome et al., 2000). Telepsychology is an integral part of telehealth and may involve technologies such as telephone, e-mail, and videoconferencing to deliver psychological services. Psychologists have been using videoconferencing since 1961 (Rohland, 2001): however, the digitalization of telecommunication lines, rapid transmission rate, and better image and sound quality have increased the use of this medium in recent years.

In addition to psychological services, videoconferencing or interactive televideo is used in a variety of health care settings (e.g., forensic and correctional centers), applications (e.g., renal dialysis), and fields (e.g., ophthalmology, oncology, dermatology, pediatrics, neonatology, and psychiatry) around the world. In the United States, telehealth applications have advanced the most rapidly in the public sector (e.g., correctional centers, Department of Defense). This form of long-distance technology can assist psychologists in traversing the vast distances that may separate them from clients in need of their services. The outreach application possibility of this technology helps increase the access of services to isolated and marginalized people, including rural populations, prison populations, military populations, disadvantaged
populations, and those who are isolated because of disability. In addition, some clients may be reluctant to attend traditional psychotherapy sessions because of perceived stigma attached, or others may be restricted as a function of their anxiety (e.g., agoraphobic and socially phobic clients). Thus, videoconferencing provides an important alternative for these client groups. It also reduces the impact that is experienced by an uneven distribution of services and provides psychologists with an opportunity in which they may learn how to interact effectively with isolated client populations.

In Western Australia, as well as in other countries, psychologists seem to have fallen behind other health care disciplines in the use of videoconferencing. For example, a study by VandenBos and Williams (2000) found that only 1% of psychologists surveyed in the United States had used videoconferencing to provide psychotherapy to their clients. In contrast, the survey revealed that 69% of these psychologists had used the telephone to provide psychotherapy to their clients. Psychology has had a propensity to apply videoconferencing technology only to purposes other than therapy, in contrast to their psychiatrist counterparts (Rees & Haythornthwaite, 2004). Although client groups—including child, adult, and geriatric populations—have expressed satisfaction and acceptance of this form of service (Mair & Whitten, 2000), psychologists are generally more reserved in their acceptance and satisfaction with this medium for therapist–client interactions, preferring face-to-face contact to develop enhanced therapeutic alliance.

Videoconferencing and Therapeutic Alliance

Many studies have examined the impact on therapeutic alliance when methods other than face-to-face therapy are used with clients. Day (1999) assessed the ratings of therapeutic alliance in five sessions of cognitive–behavioral therapy delivered via face-to-face, videoconferencing, and two-way audio. The participants consisted of 48 therapist–client pairs that were randomly assigned to each of the three experimental groups. The ratings comprised therapists’ exploration, client participation, and client hostility during the fourth session of therapy across these three mediums. Results indicated no significant differences in therapeutic alliance across each of the three groups, and Day (1999) concluded that therapeutic alliance could be achieved regardless of the method used to facilitate the therapeutic interaction.

Glueckauf et al. (2002) provided counseling to 22 teenagers with epilepsy in a remote area using videoconferencing, speaker phone, and face-to-face mediums. Results again indicated no significant differences across treatment groups for scores on a modified working alliance inventory and treatment adherence. All groups achieved significant reductions in problem severity and frequency. With regard to effectiveness of treatment, researchers Hufford, Glueckauf, and Webb (1999) found that videoconferencing counseling has been associated with healthy behavior changes as rated by self-report from clients and their families.

In a study conducted by Schopp, Johnstone, and Merrell (2000), 98 adult participants with cognitive disabilities were neurologically assessed by either face-to-face interview (control group) or videoconferencing interview. Client ratings of this study also indicated that no significant difference occurred between these two groups in ratings of global satisfaction, ease of communication, degree of relaxation during the interview, or psychologist caring during the interview. Psychologists, however, rated the face-to-face interview more favorably than the interviews conducted by videoconferencing.

In an explorative study conducted by Wray (2003), a videoconferencing-usage survey was sent to numerous health workers (approximately 400) in Perth, Western Australia. In total, 88 surveys were received, including 39 responses from psychologists, 19 from psychiatrists, and 20 from mental health nurses. Only 29.8% of psychologists were frequent users compared with 53.8% of psychiatrists and 66.7% of mental health nurses. Only two psychologists had used videoconferencing more than 10 times (one stated that all of these were jointly held with a psychiatrist), compared with six psychiatrists and five mental health workers.

To further investigate these differences in use of the technology, Wray and Rees (2003) qualitatively explored psychologists’ attitudes regarding the use of videoconferencing technology. Psychologists indicated that therapy conducted via videoconferencing would be less effective than face-to-face therapy. They also indicated that most crisis situations or complex client presentations would not be suitable for videoconferencing, such as clients with suicidal ideation, personality disorders, or psychosis.

Many of the psychologists in Wray’s (2003) study also believed that only time-limited, structured therapy (such as cognitive–behavioral therapy) would be acceptable to deliver via videoconferencing. The only other acceptable forms of therapy identified were assessment, reviewing homework, providing information, case management, and instructional guidance. Long-term, less structured therapy approaches—such as psychodynamic therapy, interpersonal therapy, and therapy addressing disclosures and complex clients—were deemed less acceptable to administer via videoconferencing. The common theme among the psychologists interviewed was a concern over how videoconferencing would negatively affect the development of the therapeutic alliance. In particular, they were concerned that the therapist would be compromised in being able to communicate warmth, understanding, sensitivity, and empathy as a result of the medium. Psychologists were less concerned about the impact of the medium on forming a collaborative relationship or being able to clearly communicate therapeutic goals.

Many of these issues have been raised in an excellent review of telehealth and psychotherapy by Jerome and Zaylor (2000). The authors described the differences between the provision of psychotherapy via interactive televideo (videoconferencing) and conventional, face-to-face psychotherapy. Although the authors identified several differences (e.g., slower rate of communication, differences in depth perception, interpersonal distance) between the two methods, they argued that there is insufficient evidence to draw any conclusions regarding the positive or negative impact of videoconferencing on therapeutic outcome. Rather, it is equally possible that some of videoconferencing’s unique factors may actually enhance some psychotherapeutic endeavors. For example, videoconferencing requires turn taking, as both participants cannot be heard at the same time. The authors note that this may be useful in the provision of family therapy or mediational applications, situations in which it is important to promote conversational turn taking. Jerome and Zaylor also highlighted the evidence that videoconferencing does enable the transmission of social cues and affective information. Overall, the authors have argued that a great deal more research examining how these differences might have an
impact on therapeutic process and outcome is required. However, at this stage it seems that psychologists are regarding these differences as fundamentally negative.

In summary, the current literature indicates that therapeutic alliance is not compromised when videoconferencing is used. Despite the mounting evidence supporting the positive gains that can be achieved in the use of videoconferencing for psychotherapy, psychologists currently appear to hold predominantly negative views regarding its use.

In this study, we sought to explore psychologists’ ratings of therapeutic alliance between face-to-face and videoconferencing conditions. Previous research (Wray & Rees, 2003) has shown that psychologists tend to have negative beliefs regarding the use of videoconferencing for psychotherapy. As such, we predicted that these negative beliefs or attitudes would result in lower ratings of alliance for a videoconferencing condition compared with a conventional face-to-face condition even when the actual level of alliance was held constant. To our knowledge, this represents the first study that has attempted to isolate the effect of psychologists’ own attitudes or biases on their ratings of therapeutic alliance independent of the quality of therapeutic alliance itself.

An Exploration of Therapeutic Alliance in Psychotherapy

A total of 30 Australian clinical psychologists participated in the study. Psychologists working in the Health Department of Western Australia were contacted, as the Health Department is one of the largest employers of clinical psychologists in Western Australia. The mean age of participants in the videoconferencing condition was 34.70 years (SD = 11.55), compared with 36.20 years (SD = 10.10) in the face-to-face condition. The gender distribution in each group was similar, with the videoconferencing condition having 83% female participants and the face-to-face condition having 75% female participants. Participants ranged in their level of clinical experience from less than 1 year to 20 years. The mean number of years of experience was 5.70 (SD = 5.82). All participants had completed at least master’s level training in clinical psychology. There were no differences in the mean number of years experience between the two conditions of the study, t(28) = -1.47, p = .15. Participants’ therapeutic orientations included cognitive–behavioral (50%), psychodynamic (10%), eclectic (36.7%), and schema focused (3.3%).

The HAr was used to evaluate therapeutic alliance from the perspective of an independent observer. The HAr is a 10-item questionnaire designed to be rated by a psychologist who independently assesses a 20-min sample from a session (Alexander & Luborsky, 1986). This measure conceptualizes the therapeutic alliance in terms of the client’s perception of the therapist being warm, helpful, and supportive (termed Type I alliance) and also in terms of the client and therapist collaborating together to resolve the presenting therapeutic issue (Type II alliance). Items 1–6 measure Type I alliance; Items 7–10 measure Type II alliance.

The HAr has shown convergent validity with other measures of therapeutic alliance (Cecero, Fenton, Frankenforter, Nich, & Carroll, 2001) and predictive validity with outcome measures over a range of studies (Horvath & Greenburg, 1989). Earlier validation studies have shown the concurrent validity of this measure with appropriate process measures (Alexander & Luborsky, 1986). The HAr also has shown strong internal consistency and interrater reliability (Cecero et al., 2001). The 10 items of the HAr are shown in Table 1.

One of the researchers (Sheona Stone) and an actor posing as a client recorded a simulated therapy session designed to imitate a real fourth session experience. This session was initially recorded in face-to-face format. After the video was recorded to the satisfaction of the principal researcher and the supervisor, the content was scripted verbatim, and the same session was repeated and practiced before being recorded in videoconferencing format. Both sessions were as identical as possible, including the therapist and client wearing the same clothing and accessories. After both videos were successfully recorded, an independent psychologist checked the tapes for equivalency of the conditions.

Participants were initially contacted by phone and told about the study. Those interested in participating were then sent the demographic questionnaires and a written overview of the study. The response rate of psychologists participating in the study was 100%. On receipt of the completed questionnaires, participants were then contacted to arrange a convenient time to watch a 20-min video. Psychologists were randomly assigned to either the videoconferencing or the face-to-face video condition. The videos were viewed at Curtin University of Technology or at the participant’s workplace. Participants in each group were issued a consent form and information about the video. They were then asked to view the video and rate the therapeutic alliance. Following the video, participants were given a short questionnaire asking about their extent of experience with videoconferencing.

Table 2 displays the means and standard deviations of scores on the HAr measure. Independent sample t tests indicated a significant difference between the two groups on the HAr total score, with the videoconferencing group’s means significantly lower than the face-to-face group’s means, t(28) = -2.23, p < .05. In
addition, the videoconferencing group had significantly lower scores than the face-to-face group on the Type I Alliance subscale of the HAr, $t(28) = -2.39, p < .05$. There was no significant difference between the two groups on the Type II Alliance subscale of the HAr, $t(28) = -1.65, p = .11$.

**Implications for Psychologists**

The current findings are consistent with an earlier qualitative study (Wray & Rees, 2003), which found psychologists were expressing concern about the use of videoconferencing for psychotherapy. In particular, psychologists in this study indicated that the technology would have a detrimental effect on the development of the therapeutic alliance and expressed concern regarding the effect of videoconferencing on the client’s perception of the therapist as warm, empathic, sensitive, and understanding. The present finding of lower ratings given to Type I alliance, which measures these factors within the relationship, suggests that psychologists’ ability to judge the nature of the alliance in a videoconferencing session is likely to be biased by negative expectations. Of possible interest, most of the psychologists in this study and in the earlier study by Wray and Rees (2003) had no actual experience of conducting therapy using videoconferencing or in fact had no experience with the technology at all. We intend to conduct further analyses of the effect of experience with the medium to evaluate whether more experience would reduce the negative expectations of psychologists regarding the alliance. If becoming more familiar and experienced with the technology can reduce negative beliefs regarding its use, then this would have implications for including training in this technology for psychologists.

The group of psychologists who participated in this study had a range of experience and were randomly assigned to the two conditions. Therefore it seems that length of experience as a psychologist makes no difference to the tendency to judge psychotherapy sessions delivered via videoconferencing more negatively.

It may be argued that the present findings may be the result of actual differences between the two videotaped sessions. However, this explanation has little support given that the sessions were carefully scripted and judged by an independent psychologist as equivalent in both content (verbals) and nonverbals. The only true difference between the conditions was the technology. The videoconferencing session consisted of a changing screen depending on whether the client or therapist was speaking.

This study lends strong support to the earlier finding that psychologists are holding negative expectations regarding the use of videoconferencing for the provision of psychotherapy. It should be noted, however, that only a small number of psychologists took part in the study and therefore further similar investigations—including greater numbers of psychologists from countries outside of Australia—would strengthen the conclusions that we offer. Also, most of the psychologists included in this study were cognitive–behavioral in their orientation, and thus studies including a wider range of orientations would be important.

Given these results, it is imperative to consider first the range of possible explanations for the findings and second what may be able to be done to improve acceptance of the medium. The first most obvious explanation for the finding is that the use of technology in psychotherapy represents a very different way of working and a sharp turn away from the traditional notions of what psychotherapy is all about. For example, psychologists are trained to be particularly aware of clients’ nonverbal communication and the subtle nuances that occur during the therapy session. The increasing use of alternative media to conduct therapy, such as the Internet and videoconferencing, dramatically alters the kind of communication that can occur in the therapy session. This type of change is not insignificant and can be likened to the process of moving from riding a bicycle to riding a unicycle. However, although the processes are clearly different, the outcomes do not appear to be. Thus, to help psychologists adjust to these kinds of changes in the delivery of psychotherapy, videoconferencing experts will need to provide them with adequate training.

One option would be to cover the relevant theoretical issues and research evidence regarding the use of videoconferencing (as well as other telehealth applications) in undergraduate psychology programs. Comprehensive training in the ethical issues associated with the use of this technology would be paramount. It is beyond the scope of this article to cover the ethical issues relating to videoconferencing practice. However, there are many specific considerations that would warrant attention in psychology training programs. Postgraduate psychology programs could include clinical practica that provide hands-on training and experience in various telehealth applications. Also, for the large number of experienced psychologists in practice, continuing education opportunities in the area of telehealth will need to be provided by professional associations such as the American Psychiatric Association and the Australian Psychological Society.

A related but different explanation for psychologists’ attitudes toward psychotherapy and videoconferencing may be that they have not yet accessed adequate literature regarding the impact of this medium on client outcome. The current lack of access to such information can be explained in part by the relatively low number of psychology journals reporting on the use of videoconferencing in psychotherapy (Rees & Haythornthwaite, 2004). It is therefore vitally important that more information be disseminated as widely as possible on the research that is being conducted on both process and outcome in psychotherapy with this medium.

A further possibility is that psychologists may feel professionally threatened by the increasing popularity of such mediums for delivery of mental health services. The nature of the technology itself enables easier access to therapy and removes the requirement to see a psychologist for face-to-face contact. This could be construed by some psychologists as potentially threatening to their long-term job security or as changing the nature of the kind of work that they do. If this is the case, psychologists need to be reminded that most of the technologies that are gaining popularity...
are actually increasing the pool of people that have access to psychotherapy. In other words, the technology enables people who would otherwise not be able to access psychological assistance the opportunity to do so. If anything, this is likely to result in a greater proportion of the population using the services of psychologists and other therapists.

A recent study conducted in Canada (Gagnon et al., 2003) examined the factors influencing physicians’ intention to use telemedicine in their clinical practice. The authors examined the issue by applying the theory of interpersonal behavior and found that the decision to use the technology was strongly influenced by the perceived prevailing view of the individual’s professional peer group. In other words, those physicians who believed that using the technology was normal for physicians working in their region would be more likely to use the technology. The results of this study suggest that to promote the diffusion of telehealth, campaigns should include messages from peers and specialists in the area. A replication of this study among psychologists may provide useful information to assist in guiding approaches to the promotion of the use of technology in clinical practice.

Summary

Alternative methods of mental health service delivery must exist to improve treatment accessibility for patients. Providing psychotherapy via the use of videoconferencing will enable geographically isolated patients or patients isolated because of other reasons to access help. To move forward in this field, psychologists will need to have the opportunity to become aware of their own negative beliefs regarding this issue. Increasing awareness will then enable healthy debate and the provision of appropriate corrective information as to the appropriateness of the use of videoconferencing in providing psychotherapy.

References


